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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,013	10/24/2003	Seann Pavlik	4442-8	8517

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EXAMINER	
WU, IVES J	

ART UNIT	PAPER NUMBER
1724	

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/692,013	PAVLIK, SEANN	
	Examiner	Art Unit	
	Ives Wu	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/24/03* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/6,3/31/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(1). **Claims 1-4, 6, 10, 12-14** are rejected under 35 U.S.C. 102(b) as being anticipated by Niehart (US002217130).

As to a housing defined by a bottom wall, a top wall, a pair of side walls and a pair of end wall assemblies, a plenum chamber within the housing, a fan mounted in one of end wall assemblies for supplying air flow to plenum chamber, at one misting nozzle located proximate to an outlet side of fan to supply droplets of water into the air flow and at least one misting nozzle connected to a source of water under pressure in **independent claim 1**, Niehart (US002217130) discloses a spray draft unit for humidifying and temperature control apparatus in Figure 1 (Title). The unit comprises side walls (21), top and bottom wall (19, 20), plenum chamber (unnumbered but clear from Figure 1), a fan (38) at end wall to supply air to the chamber, misting nozzle (34) near fan and connected to source of water (25, 26, 27, 29) and moisture eliminator (39, 41) at other end wall.

As to limitation of **claim 2**, Niehart discloses the discharge end of the Venturi construction of the spray draft unit having an eliminator extending across the same which comprises a series of perpendicular crenelated blades **nested in** spaced relation to form tortuous passages for the precipitation of excess water from humidified air when flowing at dew point (page 1, col. 2, line 44-50).

As to limitation of **claim 3**, the eliminator shown inn Figures 1 and 3 would change the direction of the air flow so that eliminate the droplets by impact on the crenelated blades, also shown in the Figure 2, drainage 24 from the bottom of the unit.

As to limitation of **claim 4**, shown in Figure 2, sump chamber 25 to collect the drainage from bottom by drain pipe 24.

As to limitation of **claim 6**, shown in Figure 1, there is a plurality of nozzles (34).

As to step a) of adding water droplets to a flow of air to generate a flow of cooled air in a method of supplying cooled air to a space in **independent claim 10**, Niehart discloses the spray unit including water nozzle 34 to spray the water droplets into the air produced by fan 38 shown in Figure 1. It would cause the cooling of the air naturally.

As to step b) of removing unevaporated water droplets from the cooled air in **independent claim 10**, Niehart discloses the eliminator (39) to remove moisture from the air (page 2, Col. 2, line 20-27).

As to step c) of delivering the cooled air to space in **independent claim 10**, Niehart discloses to provide the means for controlling the humidity and temperature of air circulation through a storage space by Venturi spray unit (10) (page 1, Col. 1, line 11-13).

As to limitation of **claim 12**, Niehart discloses nozzles (34) outside to fan to spray the water droplets.

As to limitation of **claim 13**, Niehart discloses the eliminator at end wall to eliminate moisture in the air coming from direction of the fan (38) and nozzles (34).

As to limitation of **claim 14**, Niehart discloses eliminator for removing moisture of the air would coalesce the moisture on the blade so that it will fall to the bottom to achieve the purpose of separation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(2). **Claims 8, 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Niehart (US002217130).

As to the limitation of **claims 8, 15**, in absence of showing the criticality of the records, the optimization of pressure range for pumping the water to the nozzle being 200 – 1,000 psi in known process renders prima facie obviousness within one of ordinary skills in the art. *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980).

(3). **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Niehart (US002217130) in view of Keeney (US006471194B2).

As to the discharge orifice of each nozzle to be 0.2 – 0.5 mm in **claim 9**, Niehart **does not teach** the diameter of nozzle as claimed.

However, Keeney (US006471194B2) **teaches** the diameter of nozzle in mist fan to be 0.007, 0.008, 0.010 and 0.02 inches (Col. 3, line 26-29), which is equivalent to 0.1778 mm to 0.508 mm.

The advantage of such diameter for the nozzle is to atomize the water so that it creates a fine mist or vapor (Col. 3, line 29-33).

Therefore, it would have been obvious at time of the invention to use the nozzle of 0.007 inches or 0.02 inches taught by Keeney for the nozzles of Niehart in order to obtain the above-mentioned advantages.

(4). **Claims 11, 16-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Niehart (US002217130) in view of Ducey (US006237860B1), evidenced by Gordon (US004443387).

As to water droplets having cross-sectional dimensions of between 5 to 100 microns in **claim 11**, Niehart **does not teach** the size of water droplets as claimed.

However, Ducey (US006237860B1) **teaches** the size of the water droplets emitted from the nozzles depending on at least three factors: the size of the nozzle opening, the pressure at which the water is delivered to the nozzles, and the angle of the nozzle (Col. 3, line 61-64).

Water droplets in the range 85 to 200 microns are so small and light that they tend to be blown around quite easily as they fall to the ground (Col. 4, line 9-11).

The advantages of small size of water droplets such as ranged from 85-200 microns is the water droplets tending to evaporate prior to reaching the ground (Col. 4, line 11-12). Also, evidenced by Gordon (US004443387) that water droplets size of approximately 0.002 inches (50 microns) becoming entrained in a moving air stream and not dropping under the influence of gravity out of the stream. Particle sizes larger than 0.002 inches will tend to drop under the influence of gravity (Col. 9, line 49-53).

Therefore. It would have been obvious at time of the invention to generate water droplet sizes such as 50 to 200 microns disclosed by Ducey, Gorden for the mist in the spray draft unit of Niehart in order to obtain the above-mentioned advantages to maximize the cooling effects.

As to the limitations of **independent claim 16**, the disclosure of Niehart, Ducey is incorporated herein by reference, the most subject matter of water droplets sized from 5 – 100 microns as claimed has been recited in applicant's claim 11, and has been discussed therein.

As to the step a) thru c) in **independent claim 16**, the disclosure of Niehart is incorporated herein by reference, the most subject matters of three steps as claimed have been recited in applicant's claim 10, and have been discussed therein.

As to the limitation of **claim 17**, the most subject matter of pressure range to deliver the water as claimed has been recited in applicant's claim 8, and has been discussed therein.

As to limitation of **claims 18 - 19**, the disclosure of Niehart is incorporated herein by reference, the most subject matters of plurality of curved vanes at outlet end of plenum chamber as claimed have been recited in applicant's claim 1 and 2, and have been discussed therein.

As to limitation of **claim 20**, the disclosure of Niehart is incorporated herein by reference, the most subject matters of plurality of vanes to catch unevaporated water droplets in the airflow, and to direct the water droplets to a drain in plenum chamber as claimed, have been recited in applicant's claims 3 and 4, and have discussed therein.

As to step d) of recirculating unevaporated water droplets removed in step b) and reuse in step a) in **claim 21**, Niehart discloses recirculation of water collected at bottom from the

eliminator (39,41) by drain pipe (24), sump tank (25) and water supply pipe 26 to the nozzle 34 as shown in Figure 2.

ALTERNATIVELY, Claims 1-21 are rejected in the following:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(1). **Claims 1, 5-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Calvert (US006502414B1) in view of Natschke et al (US006086053A), Brock (US005226293A), evidenced by Jones et al (US005598719A).

As to a housing defined by a bottom wall, a top wall, a pair of side walls and a pair of end wall assemblies in a misting apparatus in **independent claim 1**, Calvert (US006502414B1) disclose a cooler housing apparatus (Title). Shown in Figure 1, there are bottom wall, top wall, a pair of side walls and a pair of end wall. The patentee's invention comprises a cooler housing, having a front and rear opening that is used, particularly evaporative coolers (Col. 2, line 4-6). The preferred embodiment is preferably used in conjunction with a portable evaporative cooler employing this housing and further comprising the necessary components including a motor that drives pump connected to a sump tank (Col. 2, line 9-14). The evaporative cooler is well known as a misting apparatus.

As to a plenum chamber within the housing in **independent claim 1**, Calvert discloses the space within the housing in Figure 1.

As to a fan mounted in one side of end wall assemblies for supplying air flow to the plenum in **independent claim 1**, Calvert discloses cooler housing, having a front and rear opening that is used, particularly evaporative coolers (Col. 2, line 4-6). Though the preferred embodiment envisions the use of housing 10 as an integral part of the portable evaporative cooler (Col. 3, line 3-5). It would have been obvious to install a fan mounted at the rear end wall of the housing to supply the mist for the evaporative cooling shown in Figure 1.

As to at least one misting nozzle located proximate to an outlet side of fan to supply droplets of water into air flow, at least one misting nozzle connected to a source of water under pressure in **independent claim 1**, Calvert **does not teach** specific fan with misting nozzle and water supply under pressure as claimed.

However, Natschke et al (US006086053A) **teach** a fan guard mounted mister having plurality of spaced nozzles (Title). Illustrated in the Figures 1-3, the installation meets requirements as claimed. The valve 64 receives water from a hose 68, such as a garden hose or the like, attached to a pressurized water source (Col. 3, line 41-43).

The advantage of using fan, mister installation of Natschke et al is to uniformly disperse a fine mist within the airflow produced by the rotating fan blades (Col. 1, line 34-36).

Therefore, it would have been obvious at time of the invention to install the fan with mister disclosed by Natschke et al at the end wall of the evaporative cooling housing of Calvert in order to obtain the above-mentioned advantage.

As to a moisture eliminator mounted in the other end wall assemblies, moisture eliminator shaped to remove unevaporated droplets before air flow exits plenum chamber in **independent claim 1**, Calvert **does not teach** a moisture eliminator at front wall of the housing to remove unevaporated droplets before air flow exiting plenum chamber.

However, Brock (US005226293A) **teaches** louver system for evaporative air coolers 40 as shown in Figure 1.

The advantages of using louver system are to retain moisture within the unit and to prevent the entrance of precipitation (Col. 2, line 40-45) so that the finely atomized water will not soak people in the area as evidenced by Jones et al (US005598719, Col. 3, line 19-20), to be capable of being field adapted for particular application (Col. 3, line 1-3).

Therefore, it would have been obvious at time of the invention to install a louver system disclosed by Brock at the other end wall (front) of the evaporative cooling housing of Calvert in order to obtain the above-mentioned advantage.

As to limitation of **claims 5 - 7**, in view of the mounted mister having plurality of spaced nozzles disclosed by Natschke et al in Figures 1-3, it would have been obvious to have nozzles on the hub by feeding the water thru the hub from the back of the fan because same performance would be accomplished either by nozzles located outside of the hub, closely in-line with the hub or by nozzles on the hub.

As to limitation of **claim 8**, in absence of showing the criticality of the records, the optimization of pressure range to be from 200 – 1,000 psi in a known process renders *prima facie* obviousness within one of ordinary skills in the art. *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980).

(2). **Claims 2–4, 10, 12-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Calvert (US006502414B1) in view of Natschke et al (US006086053A), Brock (US005226293A) further in view of Hill et al (US003813855).

As to the frame comprising a plurality of substantially vertically oriented vanes secured within a frame in **claim 2**, Brock **does not teach** the vane type separator as claimed.

However, Hill et al (US003813855) **teach** a separator to provide a tortuous flow path of serpentine form having an impact surface and a drain surface from the gas flow path (Col. 2, line 7-11). The patentee's invention provides parallel plates of serpentine shape and arranged in vertical plane (Col. 2, line 18-19). Shown in Figure 1, a number of plates, bound together as a unit of baffle structure. In Figure 3, the separator 37 unit is placed inside the vessel.

The advantage of this separator of Hill et al is to separate plural fluid phases by impact and draining. Liquid particles, carried by the gas, strike the surfaces, wet the surfaces and flow down the surfaces in separation from the gas (Col. 1, line 6-12). The drain surface from the impact surface at an angle from the direction of gas flow so liquid flowing onto the drain surface will effectively, be removed from the path of the gas flow and be able to descend by gravity to a lower collection of the liquid (Col. 2, line 12-17).

Therefore, it would have been obvious at time of the invention to place a vane-type separator disclosed by Hill et al instead of the louver system of Brock in the evaporative cooling housing of Calvert in order to obtain the above-mentioned advantage.

As to limitation of **claim 3**, Hill et al disclose a serpentine path falling into the broad class of tortuous path. After all, diverting the direction of a fluid and gas obviously results in impact of liquid on the diverting surface. Once the liquid contacts the surface and wets (clings) to it, the gas moves on. Separation of the two phases has taken place (Col. 3, line 39-45). The only way to go is down, and down the liquid flows, to gravitate out the bottom of the baffle section and collect in a body (Col. 4, line 12-15). It would be obvious that the water in the bottom of the vane-type separator will be collected in the bottom wall of the evaporative cooler housing since the central collection chamber 15 formed within base 30, provides the preferable location to store water or similar fluid to be used in conjunction with an evaporative cooler (Col. 3, line 36-40, Calvert).

As to limitation of **claim 4**, Calvert discloses the preferred embodiment is preferably used in conjunction with a portable evaporative cooler employing this housing and further comprising the necessary components including a motor that drives a pump connected to a sump tank (Col. 2, line 6-11). Moreover, the sump tank comprising a central base further comprising at least one additional cavity defined by the far edges of the unit, creating pontoon-like structures that extent to the bottom sides of the unit. This structure dramatically increases the volume of water that may be stored in the unit. This housing connects each cavity to the central collection chamber via channels (drain) in the bottom of the housing (Col. 2, line 24-31). Furthermore, central collection chamber 15 formed within the interior of integrally formed base 30 provides the preferable location to store water or similar fluid to be used in conjunction with an evaporative cooler (Col. 3, line 36-40).

As to step a) and c) in a method of supplying cooled air to a space in **independent claim 10**, Calvert discloses the cooler housing having a front, rear opening, that is used, particularly evaporative coolers (Col. 2, line 2-4). Therefore, it would be obvious for adding water droplets to a flow of air to thereby generate a flow of cooled air as the Natschke et al mister is installed. Also, it would be obvious for delivering the cooled air to the space because evaporative cooler delivering cooled air to the space is well known in the art.

As to step b) in a method of supplying cooled air to a space in **independent claim 10**, Brock discloses the louver system which would remove water droplets from cooled air as the louver system is installed in the front opening of evaporative cooler housing of Calvert.

As to limitation of **claim 12**, the disclosure of Calvert, Natschke et al is incorporated herein by reference, the most subject matter of one or more misting nozzles on an outlet side of a fan as claimed has been recited in applicant's claim 6, and has been discussed therein.

As to limitation of **claim 13**, the disclosure of Calvert, Hill et al is incorporated herein by reference, the most subject matter of a plurality of curved vanes to collect the unevaporated water droplets as claimed has been recited in applicant's claims 1 an 2 and has been discussed therein.

As to limitation of **claim 14**, the disclosure of Calvert, Hill et al is incorporated herein by reference, the most subject matters of collecting water droplets at bottom wall of housing and reuse of water as claimed, has been recited in applicant's claims 3 and 4, and has been discussed therein.

As to the limitation of **claim 15**, the most subject matter of pressure range to deliver the water as claimed has been recited in applicant's claim 8, and has been discussed therein.

(3). **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Calvert (US006502414B1) in view of Natschke et al (US006086053A), Brock (US005226293A) further in view of Keeney (US006471194B2).

As to the discharge orifice of each nozzle to be 0.2 – 0.5 mm in **claim 9**, Natschke et al **do not teach** the diameter of nozzle as claimed.

However, Keeney (US006471194B2) **teaches** the diameter of nozzle in mist fan to be 0.007, 0.008, 0.010 and 0.02 inches (Col. 3, line 26-29), which is equivalent to 0.1778 mm to 0.508 mm.

The advantage of such diameter for the nozzle is to atomize the water so that it creates a fine mist or vapor (Col. 3, line 29-33).

Therefore, it would have been obvious at time of the invention to use the nozzle of 0.007 inches or 0.02 inches taught by Keeney for the nozzles of Natschke et al in the evaporative housing of Calvert in order to obtain the above-mentioned advantages.

(4). **Claims 11, 16-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Calvert (US006502414B1) in view of Natschke et al (US006086053A), Brock (US005226293A) further in view of Hill et al (US003813855) and Ducey (US006237860B1).

As to water droplets having cross-sectional dimensions of between 5 to 100 microns in **claim 11**, Calvert, Natschke et al, Brock **do not teach** the size of water droplets as claimed.

However, Ducey (US006237860B1) **teaches** the size of the water droplets emitted from the nozzles depending on at least three factors: the size of the nozzle opening, the pressure at which the water is delivered to the nozzles, and the angle of the nozzle (Col. 3, line 61-64). Water droplets in the range 85 to 200 microns are so small and light that they tend to be blown around quite easily as they fall to the ground (Col. 4, line 9-11).

The advantages of small size of water droplets such as ranged from 85-200 microns is the water droplets tending to evaporate prior to reaching the ground (Col. 4, line 11-12). Also, evidenced by Gordon (US004443387) that water droplets size of approximately 0.002 inches (50 microns) becoming entrained in a moving air stream and not dropping under the influence of gravity out of the stream. Particle sizes larger than 0.002 inches will tend to drop under the influence of gravity (Col. 9, line 49-53).

Therefore. It would have been obvious at time of the invention to generate water droplet sizes such as 50 to 200 microns disclosed by Ducey, Gorden for the mist of Natschke et al in the evaporative cooler housing of Calvert in order to obtain the above-mentioned advantages to maximize the cooling effects.

As to the limitations of **independent claim 16**, the disclosure of Calvert, Natschke et al, Ducey is incorporated herein by reference, the most subject matter of water droplets sized from 5 – 100 microns as claimed has been recited in applicant's claim 11, and has been discussed therein.

As to the step a) thru c) in **independent claim 16**, the disclosure of Calvert, Natschke et al, Hill et al is incorporated herein by reference, the most subject matters of three steps as claimed have been recited in applicant's claim 10, and have been discussed therein.

As to the limitation of **claim 17**, the most subject matter of pressure range to deliver the water as claimed has been recited in applicant's claim 8, and has been discussed therein.

As to limitation of **claims 18 - 19**, the disclosure of Calvert, Hill et al is incorporated herein by reference, the most subject matters of plurality of curved vanes at outlet end of plenum chamber as claimed have been recited in applicant's claim 1 and 2, and have been discussed therein.

As to limitation of **claim 20**, the disclosure of Calvert, Hill et al is incorporated herein by reference, the most subject matters of plurality of vanes to catch unevaporated water droplets in the airflow, and to direct the water droplets to a drain in plenum chamber as claimed, have been recited in applicant's claims 3 and 4, and have discussed therein.

As to step d) of recirculating unevaporated water droplets removed in step b) and reuse in step a) in **claim 21**, Calvert discloses in evaporative cooler housing further comprising a motor that drives a pump connected to a sump tank (Abstract, line 8-9). The central collection chamber 15 formed within the interior of integrally formed base 30, provides the preferable location to store water or similar fluid to be used in conjunction with an evaporative cooler (Col. 3, line 36-40).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Ives Wu
Art Unit: 1724
Date: November 17, 2006

DUANE SMITH
PRIMARY EXAMINER
D-S
11-21-06